COUNCIL COMMUNICATION				
CITY OF <b>DES MOINES</b> OFFICE OF THE CITY MANAGER	Number:	21-169	Meeting:	April 19, 2021
	Agenda Item:	30A	Roll Call:	21-0631
	Submitted by:	Anna W. Whipple, CIO, Information Technology Director		

#### **AGENDA HEADING:**

Approval of purchase of Cisco IE4000 network hardware for Intelligent Transportation Systems from Heartland Business Systems, (Peter Helander, CEO, 108 3rd Street, Suite 300, Des Moines, Iowa 50309) per the State of Iowa Contract No. 4846A, NASPO ValuePoint AR233, which is competitively bid.

## **SYNOPSIS:**

Recommend approval of the purchase of Cisco IE 4000 network hardware from Heartland Business Systems, per the State of Iowa Contract No. 4846A, NASPO ValuePoint AR233, which is competitively bid. This purchase will allow the Information Technology (IT) Department to purchase the network equipment and management software to support Phase 1 of the Intelligent Transportation Systems (ITS) Master Plan. The implementation of ITS requires deploying IP networking capabilities to City traffic signal cabinets.

#### **FISCAL IMPACT:**

Amount: \$200,713.20

## **Funding Source:**

- \$184,556.80 from CIP Fiscal Year (FY)2020/2021, TR097, C038EG99, Traffic System Operation Improvements, G.O. Bonds, Page Street 54
- \$16,156.40 from CIP FY2020/21, MS001, C051IT99, Miscellaneous Improvements Enhanced City-wide Information and Communication Systems, Page 7

## **ADDITIONAL INFORMATION:**

- The results and recommendations of the ITS Master Plan were presented to City Council at a
  work session on October 22, 2018. On November 19, 2018, the City Council adopted the ITS
  Master Plan as a framework for the City of Des Moines future traffic management and
  communication system infrastructure.
- The ITS Master Plan addresses major components: signal system hardware and software, work order system, fiber communications infrastructure, video observation cameras, and dynamic message signs.

- The current ITS infrastructure for the City of Des Moines primarily consists of antiquated technologies, including traffic signal controllers using 1970s technology, video observation cameras that are often not operable, and a central management software that is outdated and will soon be unable to run on City computer systems due to operating system upgrades.
- The ITS Master Plan is broken into eight (8) phases that are prioritized on vehicle volumes, roadway capacity, annual crashes, truck/transit route needs, existing operational issues, and conditions of existing communications.
- Phase 1 includes upgrading 29 traffic signal locations along:
  - o Martin Luther King Jr. Parkway from Fleur Drive to E. 30th Street
  - o E. 30th Street from Martin Luther King Jr. Parkway to E. University Avenue
  - o E. University Avenue from I-235 to Williams Street
  - o Hubbell Avenue from E. University Avenue to E. Euclid Avenue
  - o E. Euclid Avenue from E. 14th Street to Hubbell Avenue
  - o E. 14th Street from E. Euclid Avenue to E. Grand Avenue
- The upgrades at each intersection in Phase 1 include:
  - o Fiber optic cable
  - o IP Network switch
  - o Traffic signal cabinet, controller, and ITS device as applicable

# PREVIOUS COUNCIL ACTION(S):

Date: November 19, 2018

Roll Call Number: 18-1895

<u>Action</u>: <u>Approval</u> of the Intelligent Transportation System (ITS) Master Plan as the framework for the City's future traffic management and communication systems infrastructure. (<u>Council Communication</u> No. 18-624) Moved by Gatto to adopt. Motion Carried 7-0.

## **BOARD/COMMISSION ACTION(S): NONE**

## ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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